introducing into the amorphous semiconductor film an element which promotes crystallization of the amorphous semiconductor film;

crystallizing the amorphous semiconductor film by a first heat treatment to form a crystalline semiconductor film;

selectively introducing an impurity element belonging to Group 15 into [at least one region] a first portion of [selected in] the [crystallized] crystalline semiconductor film [obtained by crystallizing the amorphous semiconductor film];

gettering the element which promotes crystallization by a second heat treatment to the [region into which the impurity element is introduced] first portion of the crystallized semiconductor film; [and]

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patterning [said] the crystallized semiconductor film [into island-shape] to form a crystalline semiconductor island thereby removing [said region to which the impurity element is introduced,] the first portion of the crystalline semiconductor film; and

forming an active layer using the crystalline semiconductor island,

wherein the heat treatment during gettering the element [which promotes crystallization] is performed in a temperature range not exceeding a glass transition point of the substrate.

2. (Amended) A method according to claim 1, wherein [a semiconductor film obtained by crystallizing the amorphous semiconductor film is a] the crystalline semiconductor film [having] has grain boundaries.

3. (Amended) A method according to claim 1, wherein the second heat treatment during gettering is performed in the temperature range from 500 to 700 °C.

5. (Amended) A method according to claim 1, wherein the second heat treatment during gettering is furnace annealing.

9. (Amended) A method of manufacturing a semiconductor device, said method comprising the steps of:

forming an amorphous semiconductor film comprising silicon over a substrate having an insulating surface;

selectively introducing into a first portion of the amorphous semiconductor film an element which promotes crystallization of the amorphous semiconductor film;

crystallizing [at least a part of] the amorphous semiconductor film by a first heat treatment to form a crystalline semiconductor film, so that a crystallization

proceeds from the first portion in a lateral direction to the insulating surface;

introducing an impurity element belonging to Group 15 into [at least one region] a second portion [selected in] of the [crystallized] crystalline semiconductor film [obtained by crystallizing at least a part of the amorphous semiconductor film];

gettering the element [which promotes crystallization] by a second heat treatment to the [region into which the impurity element is introduced] second portion of the crystalline semiconductor film; and

patterning [said crystallized] the crystalline semiconductor film [into island-shape] to form a crystalline semiconductor island thereby removing [said region into which the impurity element is introduced] the second portion of the crystalline semiconductor film;[,]

forming an active layer using the crystalline semiconductor island, wherein the second heat treatment during gettering the element [which promotes crystallization] is performed in a temperature range not exceeding a glass transition point of the substrate. (Example 2.)

10. (Amended) A method according to claim 9, wherein [a crystallized semiconductor film obtained by introducing an impurity element belonging to Group 15 is a] the crystalline semiconductor film [having] has grain boundaries.

11. (Amended) A method according to claim 9, wherein the second heat treatment during gettering the element [which promotes crystallization] is performed in the temperature range from 500 to 700°C.

13. (Amended) A method according to claim 9, wherein the second heat treatment during gettering is furnace annealing.

17. (Amended) A method of manufacturing a semiconductor device, said method comprising the steps of:

forming an amorphous semiconductor film comprising silicon over a substrate having an insulating surface;

selectively introducing into the amorphous semiconductor film an element which promotes crystallization of the amorphous semiconductor film;

crystallizing the amorphous semiconductor film by a first heat treatment to form a crystalline semiconductor film;

irradiating a laser light or an intense light to the [crystallized] crystalline semiconductor film [obtained in the step of crystallizing the amorphous semiconductor film];

introducing an impurity element belonging to Group 15 into [at least one region selected in the semiconductor film obtained by irradiating a laser light or an intense light] a first portion of the crystalline semiconductor film after the irradiating step; [and]

gettering the element [which promotes crystallization] by a second heat treatment to the [region into which the impurity element is introduced] first portion of the crystalline semiconductor film;[,]

patterning the crystalline semiconductor film to form a crystalline semiconductor island thereby removing the first portion of the crystalline semiconductor film; and

forming an active layer using the crystalline semiconductor island, wherein the second heat treatment during gettering is performed in a temperature range not exceeding a glass transition point of the substrate.

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18. (Amended) A method according to claim 17, wherein [a crystallized semiconductor film obtained by crystallizing the

amorphous semiconductor film is a] the crystalline semiconductor film [having] has grain boundaries.

19. (Amended) A method according to claim 17, wherein the second heat treatment during gettering is performed in the temperature range from 500 to 700°C.

21. (Amended) A method according to claim 17, wherein the second heat treatment during gettering is furnace annealing.

25. (Amended) A method of manufacturing a semiconductor device, said method comprising the steps of:

forming an amorphous semiconductor film comprising silicon over a substrate having an insulating surface;

selectively introducing into a first portion of the amorphous semiconductor film an element which promotes crystallization of the amorphous semiconductor film;

crystallizing [at least a part of] the amorphous semiconductor film by a first heat treatment to form a crystalline semiconductor film, so that a crystallization proceeds from the first portion of the amorphous semiconductor film in a lateral direction to the insulating surface;

irradiating a laser light or an intense light to the crystalline semiconductor film [obtained by crystallizing at least a part of the amorphous semiconductor film];

introducing an impurity element belonging to Group 15 into [at least one region] a second portion [selected in the semiconductor film obtained by irradiating a laser light or an intense light] of the crystalline semiconductor film after the irradiating step;

gettering the element [which promotes crystallization] by a second heat treatment to the [region into which the impurity element is introduced] second portion of the crystalline semiconductor film;[,]

patterning the crystalline semiconductor film to form a crystalline semiconductor island thereby removing the second portion of the crystalline semiconductor film;

forming an active layer using the crystalline semiconductor island, wherein the second heat treatment during gettering is performed in the temperature range not exceeding a glass transition point of the substrate.

26. (Amended) A method according to claim 25, wherein [a crystallized semiconductor film obtained by the gettering is a]

the crystalline semiconductor film [having] has grain boundaries.

27. (Amended) A method according to claim 25, wherein the second heat treatment during gettering is performed in the temperature range from 500 to 700 °C.

29. (Amended) A method according to claim 25, wherein the second heat treatment during gettering is furnace annealing.

45. (Amended) A method of manufacturing a semiconductor device, said method comprising the steps of:

forming an amorphous semiconductor film comprising silicon over a substrate having an insulating surface;

selectively introducing into the amorphous semiconductor film an element which promotes crystallization of the amorphous semiconductor film;

crystallizing the amorphous semiconductor film by a first heat treatment to form a crystalline semiconductor film;

introducing an impurity element belonging to Group 15 into [at least one region] a first portion [selected in the crystallized semiconductor film obtained in the step of

crystallizing the amorphous semiconductor film] of the crystalline semiconductor film;

gettering the element which promotes crystallization by a second heat treatment into the [region] first portion [into which the impurity element is introduced] of the crystalline semiconductor film;

patterning [said crystallized] the crystalline semiconductor film [into island-shape] to form a crystalline semiconductor island thereby removing [said region into which the impurity element is introduced] the first portion of the crystalline semiconductor film;

forming a gate insulating film over [island-shaped semiconductor film obtained by patterning] the crystalline semiconductor island;

forming at least one gate electrode comprising a metal on [said] the gate insulating film;

doping an impurity into at least a [part] second portion of [said island-shaped semiconductor film] the crystalline semiconductor island to form a lightly doped drain region; and

forming at least a source region and a drain region by doping an impurity into [at least a part] third portions of [said island-shaped semiconductor film] the crystalline semiconductor island,

wherein the second heat treatment during gettering is performed in a temperature range not exceeding a glass transition point of the substrate.

46. (Amended) A method according to claim 45, wherein the second heat treatment during gettering is performed in the temperature range from 500 to 700°C.

52. (Amended) A method of manufacturing a semiconductor device, said method comprising the steps of:

forming an amorphous semiconductor film comprising silicon over a substrate having an insulating surface;

selectively introducing into the amorphous semiconductor film an element which promotes crystallization of the amorphous semiconductor film;

crystallizing the amorphous semiconductor film by a first heat treatment to form a crystalline semiconductor film;

introducing an impurity element belonging to Group 15 into [at least one region] a first portion [selected in the crystallized semiconductor film obtained by crystallizing the amorphous semiconductor film] of the crystalline semiconductor film;

gettering the element [which promotes crystallization] by a second heat treatment into the [region into which the impurity is introduced] the first portion of the crystalline semiconductor film; [and]

patterning [said crystallized] the crystalline semiconductor film [into island-shape] to form a crystalline semiconductor island thereby removing [said region into which the impurity element is introduced] the first portion of the crystalline semiconductor film;

forming a gate insulating film over [island-shaped semiconductor film obtained by patterning] the crystalline semiconductor island;

forming at least one gate electrode comprising a metal on [said] the gate insulating film;

doping an impurity into at least a [part] second portion of [said island-shaped semiconductor film] the crystalline semiconductor island to form a lightly doped drain region;

forming at least a source region and a drain region by doping an impurity into [at least a part] third portions of [said island-shaped semiconductor film] the crystalline semiconductor island;

forming an interlayer insulating film comprising silicon over [said] the gate electrode;

forming an interlayer insulating film comprising an organic resin film over [said] the interlayer insulating film; and

forming a pixel electrode that is electrically connected to [said] the source region or drain region through a contact hole over [said] the interlayer film;

wherein the second heat treatment during gettering is performed in a temperature range not exceeding a glass transition point of the substrate.

Sub D21 53. (Amended) A method according to claim 52, wherein the second heat treatment during gettering is performed in the temperature range from 500 to 700 °C.

Please add new claims 75-81.

75. A method according to claim 45, wherein the amorphous semiconductor film comprises germanium.

Sub D23 76. A method according to claim 1, wherein the element in the crystalline island after the gettering step has a concentration in a range of 1×10^{18} atoms/cm^3 or lower.

77. A method according to claim 9, wherein the element in the crystalline island after the gettering step has a concentration in a range of 1 x 10^{18} atoms/cm^3 or lower.

78. A method according to claim 17, wherein the element in the crystalline island after the gettering step has a concentration in a range of 1 x 10^{18} atoms/cm^3 or lower.

79. A method according to claim 25, wherein the element in the crystalline island after the gettering step has a concentration in a range of 1 x 10^{18} atoms/cm^3 or lower.

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80. A method according to claim 45, wherein the element in the crystalline island after the gettering step has a concentration in a range of 1 x 10^{18} atoms/cm^3 or lower.

81. A method according to claim 52, wherein the element in the crystalline island after the gettering step has a concentration in a range of 1 x 10^{18} atoms/cm^3 or lower.